



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,215	03/24/2004	Christopher Jude Amies	2002P12618US01	3926

7590 12/26/2007
Elsa Keller, Legal Administrator
Siemens Corporation
Intellectual Property Department
170 Wood Avenue South
Iselin, NJ 08830

EXAMINER

LAMPRECHT, JOEL

ART UNIT	PAPER NUMBER
----------	--------------

3737

MAIL DATE	DELIVERY MODE
-----------	---------------

12/26/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/808,215	Applicant(s) AMIES ET AL. CT	
	Examiner Joel M. Lamprecht	Art Unit 3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>7/12/04</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Objections

1. Claims 1-31 are objected to as containing a number of informalities. Following is a non-exhaustive list of informalities which are contained within the claims: In claim 1, line 9, "monitoring one or more factors" should read "monitoring **of** one or more factors, and in line 11 "based on said **automatic modification of** said initial prescription". In claim 12 and claims 13, line 1, "said **automatic monitoring**". In claim 17 line 6 to line 7, incomplete thoughts seem to be merged. Specifically, "automatically monitoring one or more factors, exclusive of a position of said area of interest, ***that could affect the effectiveness of said automatically delivering said first does of therapeutic radiation*** to said area of interest of said patient Based on said diagnosis process" appears to contain two separate statements which are not linked. Examiner has implied that the word "therapy" after "said in line 6 and has examined the claim as such. Additionally, "said automatically calculating" should read "**automatic calculation**" as it appears to be intended as a noun following the word "said" in line 12. Claim 21, line 3 "**automatic calculation of...**" Claim 22, line 1 "**automatic performance of...**" Claims 25-27, line 1 "**automatic monitoring...**" Finally, in claim 16, line 2 "therapeutic **application by**" appears to be the intended wording. Appropriate correction is required.

Drawings

2. The drawings are objected to because figure 1 is too dark, making it difficult to read. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-31 are rejected under 35 U.S.C. 102(e) as being anticipated by Kapatoes et al (US 6,661,870 B2). Kapatoes et al disclose the use of both CT and MRI images in the treatment of an area of interest within a patient and the design of therapy plans before, during, and after rounds of radiation therapy are delivered to the patient (Col 2 Line 18-Col 4 Line 30). Specifically they disclose taking a scout image of the

area of interest (Col 5 Line 40-57), creating a plan (Col 5 Line 45-62), validating the initial image once a patient is ready for therapy (Col 5 Line 58-Col 6 Line 30), modifying the treatment plan to account for anatomical and positional changes at this point (Col 6 Line 5-50), delivering a dose of therapy and monitoring the dosage and therapy received during the treatment (Col 7 Line 20-50), updating the plan and performing additional treatment as needed based on anatomical and physiological changes of the diseased state of the patient (Col 7 Line 1-30, Col 3 Line 5-45), including the level of radiation received and therefore the stage of treatment at both the tumor site and the surrounding tissues (Col 6 Line 30-50). These physiological and clinical measurements are performed by imaging in an MRI/CT lab and the updating of the plan can include modifications between dosing due to unexpected changes in the tumor site thereby inducing an unscheduled break into the therapy session (Col 2 Line 40-47, Col 3 Line 58-Col 4 Line 17). Updated plans are automatically prescribed and are updated further or verified by the operator or treatment planner (Col 3 Line 5-35, Col 3 Line 58-Col 4 Line 17). The plans include dosage levels, target sites, physiological locations and identifications of tissues of interest which are all capable of being updated before, between, or for future therapy sessions (Col 5 Line 34-Col 7 Line 29).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure includes Fitchard et al (US 6,385,286 B1) which discloses additional relevant embodiments as pertains to the instant case.

Application/Control Number:
10/808,215
Art Unit: 3737

Page 5

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel M. Lamprecht whose telephone number is (571) 272-3250. The examiner can normally be reached on Monday-Friday 7:30AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian L. Casler can be reached on (571)272-4956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ruth S. Smith/
Ruth S. Smith
Primary Examiner
Art Unit 3737

JML